

DYNAMIC POINTING ACCURACY EVALUATION SYSTEM AND
METHOD USED WITH A GUN THAT FIRES A PROJECTILE UNDER
CONTROL OF AN AUTOMATED FIRE CONTROL SYSTEM

ABSTRACT OF THE DISCLOSURE

5 A dynamic pointing accuracy evaluation system is used in conjunction
with a weapon system that includes a gun that fires a projectile from a barrel
toward a target. The firing of the projectile occurs upon receipt of a shoot
command from an automated fire control system that is activated by a firing
command generated by a gunner viewing the target through a gun sight. The
10 dynamic pointing accuracy evaluation system includes a firing-image camera
mounted to a barrel of the gun and aimed parallel to a boresight of the gun. A
photo trigger command line transmits a photo trigger command from the fire
control system to the firing-image camera. The firing-image camera produces a
firing image upon receipt of the photo trigger command. A computer receives the
15 firing image and determines a calculated strike location from the firing image and
from a range of the gun to the target.